State of Montana Department of Environmental Quality Helena, Montana 59620

# AIR QUALITY OPERATING PERMIT NUMBER OP2655-02

Renewal Application Received: February 16, 2006

Application Deemed Administratively Complete: March 14, 2006 Application Deemed Technically Complete: March 14, 2006

AFS Number: 030-029-0012A

Draft Issue Date: **January 23, 2008**Proposed Issue Date: **March 10, 2008** 

End of EPA 45-day Review:

Date of Decision: Effective Date: Expiration Date:

In accordance with the Montana Code Annotated (MCA) sections 75-2-217 and 218, and Administrative Rules of Montana (ARM), Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

Columbia Falls Aluminum Company, LLC
NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Section 3, Township 30 North, Range 20 West, Flathead County, Montana
2000 Aluminum Drive
Columbia Falls, MT 59912

hereinafter referred to as "CFAC," is authorized to operate a stationary source of air contaminants consisting of the emissions units described in this permit. Until this permit expires, is modified, or revoked, the permittee is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable, unless otherwise specified. Requirements that are only state enforceable are identified in the permit. A copy of this permit must be kept on site at the above-named facility.

Issued by the Departmen	t of Environmental Quality
	//
Signature	Date

Permit Issuance and Appeal Process: In accordance with ARM 17.8.1232, the Department of Environmental Quality (Department) provided a 30-day public comment period from January 23, 2008, to February 22, 2008, on the draft permit. Any comments received by the Department regarding this permit have been summarized in the attached technical review document. This proposed permit will be sent to the United States Environmental Protection Agency (EPA). The EPA is allowed a 45-day review period on the proposed permit. After the EPA comment period has expired, the Department intends to issue a decision on the permit. In accordance with Section 75-2-218, MCA, the Department's decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision. The decision may be appealed to the Board of Environmental Review (Board) by filing a request for a hearing within 30 days after the date of decision. The filing of a request for hearing does not stay the Department's decision, unless the Board orders a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-218(6)(b), MCA. If no stay is ordered, the Department's decision on the application is final 30 days after the decision is made. For more information please contact the Department at (406) 444-3490.

OP2655-02 i Proposed: 03/10/08

# Montana Air Quality Operating Permit Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

#### SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Columbia Falls Aluminum Company LLC

Mailing Address: 2000 Aluminum Drive

City: Columbia Falls State: MT Zip: 59912

Plant Location: Columbia Falls; NE 1/4, SE 1/4, Section 3, Township 30 North, Range 20 West

**Responsible Official:** Charles D. Reali **Phone:** 406-892-8225

Facility Contact Person(s): Steve Wright Phone: 406-892-8211

**Primary SIC Code: 3334** 

Nature of Business: Primary Aluminum Production

## **Description of Process:**

CFAC operates five Vertical Stud Soderberg potlines at the Columbia Falls plant. Each potline has 120 individual cells that produce aluminum by the Hall-Heroult process. Annual operating capacity is approximately 185,000 tons of Aluminum, based on an average current efficiency of 90.5%.

The Hall-Heroult process consists of passing an electric current through aluminum oxide ore, or alumina  $(Al_2O_3)$ , dissolved in molten cryolite. The reduction process is accomplished in a Vertical Stud Soderberg style pot. Soderberg technology describes the type of consumable carbon anode used in the process.

The cells or "pots" are housed in buildings called potrooms; two potrooms are connected electrically in series to form one potline. CFAC currently has 10 potrooms that comprise the five potlines. Emissions from each pot are divided into two categories: primary emissions and secondary emissions. Primary emissions are captured at the pots and routed to the primary air pollution control system, the A398 dry alumina scrubbers. Secondary emissions are fugitive emissions from the pots that are vented out the roofline of the potrooms.

Alumina is fed into a molten bath of cryolite, and heated to about 950°C (1740°F). Through the electrochemical process, electricity passes from the anode to the cathode, causing the aluminum to be reduced. The aluminum metal sinks below the cryolite bath to form a molten aluminum "pad." The evolved oxygen atoms bond with the carbon in the anode of the cell to form carbon monoxide and carbon dioxide. Other emissions from the process include both particulate fluoride and gaseous hydrogen fluoride as well as hydrocarbon emissions containing polycyclic organic matter. The aluminum metal is siphoned from the pot every 48 hours and transported to the Casting Department, where it is cast into ingots of various sizes, shapes and alloys. Typically each pot produces approximately 1700 pounds of aluminum per day.

# SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

Emission Unit ID	Emission Unit Description	Pollution Control Device or Practice
EU001	Ball Mill North - MH01	Baghouse
EU002	Ball Mill South - MH02	Baghouse
EU003	Coke Silo - MH04	Baghouse
EU004	East Alumina Elevator - MH06	Baghouse
EU005	East Alumina Unloading - MH07	Baghouse
EU006	East Conveyor Storage - MH08	Baghouse
EU007	West Alumina Unloading - MH09	Baghouse
EU008	Anode Dust Control System MH03(1) & MH03(2)	Baghouse
EU009	Coke Unloading - MH05	Baghouse
EU010	West Conveyor Storage - MH10	Baghouse
EU011	Potline Sweeping - AR04	Baghouse
EU012	Treatment of Aluminum Crucibles (TAC) Operations - CO10	Baghouse
EU013	Pin Cleaning - West Plant - CR07	Baghouse
EU014	Pin Cleaning - East Plant - CR07a	Baghouse
EU015	Paste Plant Extruder - PP01	Procedair Dry Coke Scrubber (Baghouse)
EU016	Paste Plant Mixer - PP02	Procedair Dry Coke Scrubber (Baghouse)
EU017	Pinhole Past Drying - PP03	Baghouse
EU018	Pitch Storage Tank Vents - PP04	Condensation Tower/Vent
EU019	Paste Plant Oil Heating System - PP05	None
EU020	East Plant Dry Scrubber Alumina Transfer (North) - AR01	Baghouse
EU021	East Plant Dry Scrubber Alumina Transfer (South) - AR02	Baghouse
EU022	West Plant Dry Scrubber Alumina Transfer (North) - AR06	Baghouse
EU023	West Plant Dry Scrubber Alumina Transfer (South) - AR07	Baghouse
EU024	Primary Gas Collection System - West Plant	Alcoa A398 Dry Alumina Scrubber #1
	(Potlines 1 & 2) - AR05	(Reactor #1 & Baghouse)
EU025	Primary Gas Collection System - West Plant	Alcoa A398 Dry Alumina Scrubber #2
	(Potlines 1 & 2) - AR05	(Reactor #2 & Baghouse)
EU026	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #3 (Reactor #3 & Baghouse)
EU027	Primary Gas Collection System - West Plant (Potlines 1 & 2) - AR05	Alcoa A398 Dry Alumina Scrubber #4 (Reactor #4 & Baghouse)
EU028	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #5 (Reactor #5 & Baghouse)
EU029	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #6 (Reactor #6 & Baghouse)
EU030	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #7 (Reactor #7 & Baghouse)
EU031	Primary Gas Collection System - East Plant (Potlines 3, 4, & 5) - AR05	Alcoa A398 Dry Alumina Scrubber #8 (Reactor #8 & Baghouse)
EU032	Primary Gas Collection System - East Plant	Alcoa A398 Dry Alumina Scrubber #9
10032	(Potlines 3, 4, & 5) - AR05	(Reactor #9 & Baghouse)
EU033	Primary Gas Collection System - East Plant	Alcoa A398 Dry Alumina Scrubber #10
	(Potlines 3, 4, & 5) - AR05	(Reactor #10 & Baghouse)
EU034	Potline #1 Roof Vent, West Plant - AR03	None

EU035	Potline #2 Roof Vent, West Plant - AR03	None
EU036	Potline #3 Roof Vent, East Plant - AR03	None
EU037	Potline #4 Roof Vent, East Plant - AR03	None
EU038	Potline #5 Roof Vent, East Plant - AR03	None
EU039	Casting Furnace #3 - CO01	None
EU040	Casting Furnace #4 - CO02	None
EU041	Casting Furnace #6 - CO03	None
EU042	Casting Furnace #7 - CO04	None
EU043	Casting Furnace #8 & #9 - CO05	None
EU044	Casting Pit #3 - CO06	None
EU045	Casting Pit #4 - CO06	None
EU046	Casting Pit #6 & #7 - CO06	None
EU047	Casting Pit #8 & #9 - CO06	None
EU048	Dross Handling - CO07	None
EU049	Sheet Ingot Saw – CO08	Target Box and Cyclone
EU050	T-Ingot Saw – CO09	Target Box and Filter or Cyclone
EU051	Sandblasting Activities - CR01	None
EU052	Lectromelt Furnace - CR03	Baghouse
EU053	Rod Mill/Material Storage/Bath Crushing - CR04	Baghouse
EU054	Change House Boiler #1 - MP01	None
EU055	Change House Boiler #2 - MP02	None
EU056	Lab Boiler #1 - MP07	None
EU057	Machine Shop Boiler #1 - MP08	None
EU058	Machine Shop Boiler #2 - MP09	None
EU059	Paste Plant Boiler #1 - MP11	None
EU060	Paste Plant Boiler #2 - MP12	None
EU061	Warehouse Boiler #1 - MP16	None
EU062	Warehouse Boiler #2 - MP17	None
EU063	Haul Road Emissions - MP05	None
EU064	Gasoline Storage Tank - MP04	None
EU065	Sow Casting Line	None

#### Section III Permit Conditions

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

## A. FACILITY-WIDE

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	
A.2	ARM 17.8.230	Ambient Air Monitoring	Fluoride in Forage	See Appendix K
A.3	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.4	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.5	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.6	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	
A.7	ARM 17.8.308(3)	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.8	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ Or $E = 1.026 * H^{-0.233}$
A.9	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67} Or$ $E = 55 * P^{0.11} - 40$
A.10	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu Fired
A.11	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.12	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000-Gallon Capacity	
A.14	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	
A.15	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.16	ARM 17.74.336	Asbestos	Asbestos	
A.17	40 CFR Part 63, Subpart LL	Aluminum MACT	Fluoride, Polycyclic Organic Matter	See Appendix F
A.18	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	
A.19	ARM 17.8.1207	Reporting Requirements	Annual Certification	

## **Conditions**

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list "as required by the Department" refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing "as required by the Department" as the frequency, is verified annually using emission factors and engineering calculations by the Department's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

- A.2. Pursuant to ARM 17.8.230 and Appendix K of this permit, CFAC shall conduct ambient monitoring.
- A.3. Pursuant to ARM 17.8.304(1), CFAC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

- A.4. Pursuant to ARM 17.8.304(2), CFAC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(1), CFAC shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308(2), CFAC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.308(3), CFAC shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.8. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, CFAC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment, calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  $E = 0.882 * H^{-0.1664}$ For new fuel burning equipment (installed on or after November 23, 1968):  $E = 1.026 * H^{-0.233}$ 

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emission rate in pounds per MMBtu.

A.9. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, CFAC shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter, calculated using the following equations:

For process weight rates up to 30 tons per hour:  $E = 4.10 * P^{0.67}$ For process weight rates in excess of 30 tons per hour:  $E = 55.0 * P^{0.11} - 40$ 

Where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour.

ARM 17.8.310(3)(a) states that this rule does not apply to particulate matter emitted from the reduction cells of a primary aluminum reduction plant; therefore, ARM 17.8.310 does not apply to particulate emissions from the roof monitors of the potline buildings, nor does it apply to particulate emissions from the primary control system (Alcoa A398 Dry Alumina Scrubbers). However, ARM 17.8.310 is applicable to all other (non combustion) processes at CFAC.

- A.10. Pursuant to ARM 17.8.322(4), CFAC shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.322(5), CFAC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324(3), CFAC shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.

- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, CFAC shall not place, store or hold in any stationary tank, reservoir, or other container with more than a 65,000-gallon capacity any crude oil, gasoline, or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, CFAC shall not use any compartment of any single or multiple-compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing, or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.15. Pursuant to ARM 17.8.342 and 40 CFR 63.6, CFAC shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.16. Pursuant to ARM 17.74.336, CFAC shall comply with all the limitations and requirements of their Asbestos Abatement Annual Permit #MTF0007.
- A.17. Pursuant to ARM 17.8.342, CFAC shall satisfy all of the applicable requirements, including emission limitations, testing, monitoring, record keeping, and reporting, of 40 CFR 63, Subpart LL, National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants (Aluminum MACT). CFAC shall also satisfy the requirements of the Compliance Schedule contained in Appendix H of this permit.
- A.18. On or before February 15 and August 15 of each year, CFAC shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, CFAC may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semi-annual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

A.19. By February 15 of each year, CFAC shall submit to the Department the compliance certification report required by Section V.B. The annual certification report required by Section V.B must include a statement of compliance based on the information available, which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

#### B. EU001 – EU007 MATERIAL HANDLING EMITTING UNITS WITH BAGHOUSES

EU001 - Ball Mill North - MH01 EU002 - Ball Mill South - MH02 EU003 - Coke Silo - MH04

Condition(s)	Pollutant/	Permit Limit	Compliance D	apliance Demonstration Reporting	Reporting
	Parameter	Parameter Method	Frequency	Requirements	
B.1, B.4, B.5, B.7, B.8, B.9, B.10, B.11	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse I & M (Appendix I)	Ongoing	Semi-annual
B.3, B.6, B.8, B.9, B.10, B.11	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

EU004 - East Alumina Elevator - MH06 EU005 - East Alumina Unloading - MH07 EU006 - East Conveyor Storage - MH08 EU007 - West Alumina Unloading - MH09

Condition(s)	Pollutant/	Permit Limit	Compliance Demonstration		Reporting
	Parameter		Method	Frequency	Requirements
B.2, B.4, B.5, B.7, B.8, B.9, B.10, B.11	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse I & M (Appendix I)	Ongoing	Semi-annual
B.3, B.6, B.8, B.9, B.10, B.11	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

#### **Conditions**

- B.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Ball Mill North-MH01, Ball Mill South-MH02, and Coke Silo-MH04, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- B.2. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the East Alumina Elevator-MH06, East Alumina Unloading-MH07, East Conveyor Storage-MH08, and West Alumina Unloading-MH09, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- B.3. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0*P^{0.11}$ -40, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

# **Compliance Demonstration**

- B.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than the relevant opacity limit (20% or 40%); then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- B.5. CFAC shall operate and maintain the baghouse for EU001 through EU007 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) to monitor compliance with condition III.B.1, and III.B.2 (ARM 17.8.1213).
- B.6. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

## **Record keeping**

- B.7. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit records to the Department upon request (ARM 17.8.1212).
- B.8. Method 5 and Method 9 test reports must be maintained on site and must be submitted to the Department, upon request, in accordance with the Montana Source Protocol and Procedures Manual (ARM 17.8.106).

## Reporting

- B.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures manual (ARM 17.8.106 and ARM 17.8.1212).
- B.10. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.11. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the reporting period; and
  - b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

# C. EU008 – EU014 EU'S WITH BAGHOUSES & GRAIN LOADING RESTRICTIONS

 $EU008 - Anode\ Dust\ Control\ System\ -\ MH03(1) \qquad EU012 - Treatment\ of\ Aluminum\ Crucibles\ -\ CO10$  and MH03(2)

EU009 - Coke Unloading - MH05 EU013 - Pin Cleaning - West Plant - CR07 EU010 - West Conveyor Storage - MH10 EU014 - Pin Cleaning - East Plant - CR07a

**EU011 - Potline Sweeping AR04** 

Condition(s)	Pollutant/	Permit Limit	Compliance D	Demonstration	Reporting
	Parameter		Method	Frequency	Requirements
C.1, C.4, C.5, C.7, C.8, C.9, C.10, C.11	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operate and Maintain Baghouse I & M (Appendix I)	Ongoing	Semi-annual
C.2, C.6, C.8, C.9, C.10, C.11	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual
C.3, C.6, C.8. C.9, C.10, C.11	Particulate Matter	0.02 gr/dscf	Method 5	As Required by the Department and Section III.A.1	Semi-annual

#### **Conditions**

- C.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Anode Dust Control System-MH03(1), Anode Dust Control System-MH03(2), Coke Unloading-MH05, West Conveyor Storage-MH10, Potline Sweeping-AR04, Treatment of Aluminum Crucibles-CO10, Pin Cleaning West Plant-CR07, and Pin Cleaning East Plant-CR07a, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)). As a result of venting indoors, EU013 and EU014 are not currently subject to this (C.1) requirement.
- C.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0*P^{0.11}$  40, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- C.3. Particulate emissions shall not exceed the 0.02 gr/dscf (ARM 17.8.752).

## **Compliance Demonstration**

- C.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than 20%; then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- C.5. CFAC shall operate and maintain the baghouse for EU008 through EU014 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) of this permit (ARM 17.8.1213).
- C.6. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

## Record keeping

- C.7. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with Appendix I and submit the records to the Department upon request (ARM 17.8.1212).
- C.8. Method 5 and Method 9 test reports must be maintained on site and must be submitted to the Department, upon request, in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

#### Reporting

- C.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.10. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.11. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the reporting period; and
  - b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

## D. EU015 - EU017 PASTE PLANT EMITTING UNITS WITH BAGHOUSES

**EU015 - Paste Plant Extruder - PP01** 

**EU016 - Paste Plant Mixer - PP02** 

Condition(s)	Pollutant/	Permit Limit	Compliance D	emonstration	Reporting
	Parameter		Method	Frequency	Requirements
D.2, D.5, D.6, D.11, D.13, D.15, D.16,	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
D.17			Visual Survey	Daily	Semi-annual
D.3, D.8, D.10, D.12, D.13, D.15, D.16, D.17	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual
D.4, D.9, D.10, D.13, D.15, D.16, D.17	Polycyclic Organic Matter (POM)	None	Operation of Dry Coke Scrubber: CFAC MACT Implementation Plan (Appendix E)	Ongoing	Annual Certification
			Visual Survey	Daily	Semi-annual

## **EU017- Pinhole Paste Drying - PP03**

Condition(s)	Pollutant/	Permit Limit	Compliance Demonstration		Reporting
	Parameter		Method	Frequency	Requirements
D.1, D.5, D.7, D.11, D.14, D.15, D.16, D.17	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Baghouse I & M (Appendix I)	Ongoing	Semi-annual
D.3, D.7, D.8, D.12, D.14, D.15, D.16, D.17	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

## **Conditions**

- D.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Pinhole Paste Drying-PP03 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- D.2. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Paste Plant Extruder-PP01 and the Paste Plant Mixer-PP02, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).

- D.3. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0*P^{0.11}$ 40, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- D.4. Polycyclic Organic Matter (POM) emissions from the paste plant shall be controlled by the operation of a Dry Coke Scrubber (ARM 17.8.302(i), ARM 17.8.342, ARM 17.8.749, and 40 CFR Part 63, Subpart LL).

## **Compliance Demonstration**

- D.5. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than the relevant opacity limit (20% or 40%); then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- D.6. Daily, CFAC shall visually survey the Paste Plant Dry Coke Scrubber for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 30% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, CFAC shall immediately conduct a method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of a liability for a violation determined using Method 9 (ARM 17.8.1213).
- D.7. CFAC shall operate and maintain the baghouse (EU017) in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) of this permit (ARM 17.8.1213).
- D.8. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).
- D.9. The Dry Coke Scrubber shall be operated when either EU015 or EU016 are operating, in accordance with the CFAC's MACT Implementation Plan (Appendix E) of this permit, to control POM emissions from the Paste Plant. The parameter monitoring system must be operated, calibrated, and maintained for the Paste Plant Dry Coke Scrubber (40 CFR 63.848(f)).
- D.10. Daily, CFAC must inspect the Paste Plant Dry Coke Scrubber to ensure that the control device is operating properly. If a monitoring device measures an operating parameter outside of the limits established in CFAC's MACT Implementation Plan (Appendix E), then CFAC shall initiate corrective action procedures identified in the Startup, Shutdown, and Malfunction Plan (Appendix G of this permit) within 1 hour (ARM 17.8.1213).

#### Record keeping

- D.11. Method 9 tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual. Method 9 reports must be maintained on site and must be submitted to the Department upon request (ARM 17.8.106).
- D.12. Method 5 test reports must be maintained on site and must be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- D.13. CFAC shall maintain, on-site, a log including all visual observations monitoring compliance with the visual survey requirement. The log shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).

D.14. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).

## Reporting

- D.15. All compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.16. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.17. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any source test conducted during the last reporting period;
  - b. Summary of corrective actions taken as a result of visual surveys;
  - c. For EU015 & EU016 only, the number of operating parameter exceedances, including visible emissions, occurring during the semi-annual reporting period (one exceedance per 24-hr period 40 CFR 63.848(i));
  - d. For EU015 & EU016 only, any corrective actions taken as a result of the daily visual surveys of visible emissions and operating parameters (Startup, Shutdown and Malfunction Plan (Appendix G)); and
  - e. For EU017 only, a summary of any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

#### E. EU018 - PITCH STORAGE TANKS - PP04

Condition(s)	Pollutant/	Permit Limit	<b>Compliance Demonstration</b>		Reporting
	Parameter		Method Frequency		Requirements
E.1, E.2, E.3, E.4, E.5, E.6	Opacity	20%	Method 9	As Required by the Department and Section III.A.1.	Semi-annual

#### **Conditions**

E.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Pitch Storage Tanks-PP04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

#### **Compliance Demonstration**

E.2. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (Arm 17.8.1213).

#### **Record keeping**

E.3. Method 9 tests shall be conducted in accordance with the Montana source Test Protocol and Procedures Manual. Method 9 reports must be maintained on site and must be submitted to the Department upon request (ARM 17.8.106).

# Reporting

- E.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.5. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirement(s) (ARM 17.8.1212).
- E.6. The semi-annual reporting shall provide a summary of the results of any source testing that was performed (ARM 17.8.1212).

#### F. EU019 - PASTE PLANT OIL HEATING SYSTEM - PP05

Condition(s)	Pollutant/Parameter	Permit Limit	<b>Compliance Demonstration</b>		Reporting
			Method	Frequency	Requirements
F.1, F.2, F.3, F.4, F.5	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual

## **Conditions**

F.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Paste Plant Oil Heating System-PP05 that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).

# **Compliance Demonstration**

F.2. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 40% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).

## **Record keeping**

F.3. Method 9 tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual. Method 9 reports must be maintained on site and must be submitted to the Department upon request (ARM 17.8.106).

#### Reporting

- F.4. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.5. The semi-annual reporting shall provide a summary of any source testing that was performed (ARM 17.8.1212).

## G. EU020 - EU023 PRIMARY SCRUBBER SYSTEM ALUMINA TRANSFER EU'S

EU020 - East Plant Dry Scrubber Alumina Transfer (North) - AR01 EU021 - East Plant Dry Scrubber Alumina Transfer (South) - AR02 EU022 - West Plant Dry Scrubber Alumina Transfer (North) - AR06 EU023 - West Plant Dry Scrubber Alumina Transfer (South) - AR07

Conditions	Pollutant/	Permit Limit	<b>Compliance Demonstration</b>		Reporting
	Parameter		Method	Frequency	Requirements
G.1, G.3, G.4, G.6, G.8, G.9, G.10	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operations & Maintenance Baghouse I & M (Appendix I)	Ongoing	Semi-annual
G.2, G.5, G.7, G.8, G.9, G.10	Particulate Matter	$E = 55*P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

## **Conditions**

- G.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the East Plant Dry Scrubber Alumina Transfer (North)-AR01, the East Plant Dry Scrubber Alumina Transfer (South)-AR02, the West Plant Dry Scrubber Alumina Transfer (North)-AR06, and the West Plant Dry Scrubber Alumina Transfer (South)-AR07, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- G.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0*P^{0.11}$ 40, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

#### **Compliance Demonstration**

- G.3. CFAC shall operate and maintain the baghouse for EU020 through EU023 in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1213).
- G.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than 20%; then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- G.5. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

# **Record keeping**

- G.6. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit the records to the Department upon request (ARM 17.8.1212).
- G.7. Method 5 and Method 9 test reports shall be maintained on site and shall be submitted to the Department in accordance with the Montana Source Protocol and Procedures Manual (ARM 17.8.106).

## Reporting

- G.8. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.9. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

- G.10. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):
  - a. The results of any source test conducted during the last reporting period; and
  - b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

#### H. EU024 - EU033 PRIMARY GAS COLLECTION SYSTEM EMITTING UNITS

**EU024 - Primary Gas Collection System - West** 

Plant - Scrubber #1 - AR05

EU025 - Primary Gas Collection System - West

Plant - Scrubber #2- AR05

EU026 - Primary Gas Collection System - West

Plant - Scrubber #3 - AR05

EU027 - Primary Gas Collection System - West

Plant - Scrubber #4 - AR05

**EU028 - Primary Gas Collection System - East** 

Plant - Scrubber #5 - AR05

EU029 - Primary Gas Collection System - East

Plant - Scrubber #6 - AR05

EU030 - Primary Gas Collection System - East

Plant - Scrubber #7 - AR05

EU031 - Primary Gas Collection System - East

Plant - Scrubber #8 - AR05

EU032 - Primary Gas Collection System - East

Plant - Scrubber #9 - AR05

EU033 - Primary Gas Collection System - East

Plant - Scrubber #10 - AR05

Condition(s) Pollutant/		Permit Limit	Complian	<b>Compliance Demonstration</b>		
	Parameter		Method	Frequency	Requirements	
H.1, H.4, H.5, H.6, H.10, H.13, H.14, H.15, H.16	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual	
			Visual Survey	Daily		
H.2, H.4, H.7, H.11, H.13, H.14, H.15, H.16, H.17	Total Fluoride (TF)	1.3 kg / Mg (per Month) or Table C of Appendix F	Method 13B or CFAC MACT Implementation Plan (Appendix E)	Annual	Quarterly	
H.3, H.4, H.8, H.9, H.12, H.13, H.14, H.15, H.16, H.17	Polycyclic Organic Matter (POM)	2.85 kg / Mg (per Quarter) or Table C of Appendix F	Method 315 or CFAC MACT Implementation Plan (Appendix E)	Annual	Quarterly	

#### **Conditions**

- H.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from West Plant Primary Gas Collection System, Scrubbers 1 through 4 (AR05), and the East Plant Primary Gas Collection System, Scrubbers 5 through 10 (AR05), that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- H.2. CFAC shall not cause or authorize Total Fluoride (TF) emissions that exceed 1.3 kg of TF per milligrams (Mg) of aluminum produced (2.6 lb TF per ton of aluminum produced) from any single potline; or if CFAC is averaging the TF emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C, of this permit (ARM 17.8.331 and ARM 17.8.342).
- H.3. CFAC shall not cause or authorize Polycyclic Organic Matter (POM) emissions that exceed 2.85 kilograms (kg) of POM per Mg of aluminum produced (5.7 lb POM per ton of aluminum produced) from any single potline; or if CFAC is averaging the POM emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C, of this permit (ARM 17.8.331 and ARM 17.8.342).

#### **Compliance Demonstration**

- H.4. Unless otherwise specified by rule, CFAC shall operate the Scrubbers on the Primary Gas Collection System at all times to demonstrate compliance with conditions III.H.1, III.H.2, and III.H.3 (ARM 17.8.749).
- H.5. As required by the Department, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than 20%; then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- H.6. Daily, CFAC shall visually survey the Primary Gas Collection System for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, CFAC shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of a liability for a violation determined using Method 9 (ARM 17.8.1213).
- H.7. CFAC shall annually perform at least one emission measurement test (three runs) for Total Fluoride (TF) on each Primary Control System (West Plant and East Plant). That is, annually, CFAC will perform one emission measurement test run for TF on three of the four dry alumina scrubbers that comprise the Primary Control System of the West Plant; and annually CFAC will perform one emission measurement test run for TF on three of the six dry alumina scrubbers that comprise the Primary Control System of the East Plant. Also, CFAC will develop a testing schedule such that all dry aluminum scrubbers shall be tested for TF at least once (one test run) every 2 years. CFAC shall maintain a 12-month rolling average of TF emissions from the Primary Control Systems using the testing results of this requirement. All valid test runs must be used. TF Emissions determined by this requirement are combined with (measured) TF secondary emissions, and divided by the total aluminum production, to monitor compliance with TF emission limits (40 CFR Part 63, Subpart LL and ARM 17.8.1213).
- H.8. CFAC shall annually perform at least one emission measurement test (three runs) for Polycyclic Organic Matter (POM) on each Primary Control System (West Plant and East Plant). That is, annually, CFAC will perform one emission measurement test run for POM on three of the four dry alumina scrubbers that comprise the Primary Control System of the West Plant; and annually, CFAC will perform one emission measurement test run for POM on three of the six dry alumina scrubbers that comprise the Primary Control System of the East Plant. Also, CFAC will develop a testing schedule such that all dry aluminum scrubbers shall be tested for POM at least once (one test run) every 2 years. CFAC shall maintain a 12-month rolling average of POM emissions from the Primary Control Systems using the testing results of this requirement. All valid test runs must be used. POM Emissions determined by this requirement are combined with measured POM secondary emissions, and divided by the total aluminum production, to demonstrate compliance with POM emission limits (as prescribed in 40 CFR Part 63, Subpart LL and ARM 17.8.1213).
- H.9. Daily, CFAC must inspect the dry alumina scrubbers of the Primary Control Systems to ensure that the control devices are operating properly. If a monitoring device measures an operating parameter outside of the limits established in CFAC's Implementation Plan (Appendix E), then CFAC shall initiate corrective action procedures as identified in the Startup, Shutdown, and Malfunction Plan within 1 hour. If an operating parameter is exceeded six times in any (semi-annual) reporting period, then any subsequent exceedance in that reporting period is a violation. For the purpose of determining the number of exceedances, no more than one exceedance shall be attributed in any given 24-hour period (ARM 17.8.1213).

## Record keeping

- H.10. Method 9 tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual. Method 9 test reports shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106).
- H.11. CFAC shall maintain a record of the results from all valid TF emission measurement runs performed on the dry alumina scrubbers of the West and East Primary Control Systems. CFAC must calculate the rolling monthly average of TF emissions exhausted from the dry alumina scrubbers. The TF emissions from the Primary Control Systems will be calculated based upon the testing required in III.H.6 (ARM 17.8.1212).
- H.12. CFAC shall maintain a record of the results from all valid POM emission measurement runs performed on the dry alumina scrubbers of the West and East Primary Control Systems. CFAC must calculate the rolling monthly average of POM emissions exhausted from the dry alumina scrubbers. The POM emissions from the Primary Control Systems will be calculated based upon the testing required in III.H.7 (ARM 17.8.1212).
- H.13. CFAC shall maintain, on-site, a log including all visual observations monitoring compliance with the visual survey requirement. The log shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- H.14. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.15. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.16. The semi-annual compliance monitoring reports shall include a summary of the number of operating parameter exceedances, including visible emissions, occurring during the reporting period (ARM 17.8.1212):
- H.17. The quarterly compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of all source testing that was performed during the quarter;
  - b. The calculated TF and POM emissions from the Primary Control Systems (TF-Monthly and POM-Quarterly);
  - c. The combined TF emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
  - d. The combined POM emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
  - e. The tons of aluminum produced (TAP) for each potline per month and quarter;
  - f. The lb of TF emitted per TAP for each potline, and each emission averaging group, per month;
  - g. The lb of POM emitted per TAP for each potline, and each emission averaging group, per quarter; and
  - h. A summary of any corrective actions taken as a result of the daily visual surveys of visible emissions and operating parameters.

Requirements III.H.13(c)-(h) above are the same as those specified in III.I.12(c)-(h). When CFAC complies with the requirements of c through h above, it is also satisfying the reporting requirements of III.I.12(c)-(h).

#### I. EU034 - EU038 POTLINE ROOF VENT EMITTING UNITS

EU034 - Potline #1 Roof Vent-West Plant - AR03 EU035 - Potline #2 Roof Vent-West Plant - AR03 EU037 - Potline #4 Roof Vent- East Plant - AR03 EU038 - Potline #5 Roof Vent- East Plant - AR03

EU036 - Potline #3 Roof Vent- East Plant - AR03

Condition(s)	Pollutant/	Permit Limit	Compliance Demonstration		Reporting
	Parameter		Method	Frequency	Requirements
I.1, I.4, I.5,	Opacity	10%	Method 9 (Appendix H)	Quarterly	Quarterly
I.8, I.9, I.12, I.13, I.14			Visual Surveys (Appendix H)	Daily	
I.2, I.6, I.10, I.12, I.13, I.14	Total Fluoride (TF)	1.3 kg / Mg (per Month) or Table C of Appendix F	Method 13B & Method 14 (Appendix E)	Three Test Runs per Month	Quarterly
I.3, I.7, I.11, I.12, I.13, I.14	Polycyclic Organic Matter (POM)	1.8 kg / Mg (per Quarter) or Table C of Appendix F	Method 315 & Method 14 (Appendix E)	One Test Run per Month	Quarterly

#### **Conditions**

- I.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Roof Vents of Potlines 1 through 5 (AR03) that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.332).
- I.2. CFAC shall not cause or authorize TF emissions that exceed 1.3 kg of TF per Mg of aluminum produced (2.6-lb TF per ton of aluminum produced) from any single potline; or if CFAC is averaging the TF emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C (ARM 17.8.331 and ARM 17.8.342).
- I.3. CFAC shall not cause or authorize POM emissions that exceed 1.8 kg of POM per Mg of aluminum produced (3.6-lb POM per ton of aluminum produced) from any single potline; or if CFAC is averaging the POM emissions from two or more potlines, the emission limit for the averaging scheme is prescribed in Appendix F, Table C (ARM 17.8.331 and ARM 17.8.342).

# **Compliance Demonstration**

- I.4. A quarterly Method 9 test, performed in accordance with the procedures described in Appendix H of this permit, must be performed in accordance with the Montana Source Test Protocol and Procedures Manual. The Method 9 test shall be used to determine compliance with the 10% opacity limit. Each observation period shall be a minimum of 6 minutes, unless any one reading is greater than 10%; then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).
- I.5. Daily, CFAC shall visually survey the Potline Roof Vent for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 5% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, CFAC shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- I.6. Monthly, CFAC shall perform at least three emission measurement test runs for Total Fluoride (TF) on each potline (each Method 14 manifold system). Test runs must be the same duration as a pot cycle, or 48 hours. The minimum TF secondary emission testing schedule (three times per month) must adhere to the schedule defined in 40 CFR 63.847(b)(8); that is, at least one test run must be performed before the 15<sup>th</sup> of each month, one test run must be performed after the 15<sup>th</sup> of each month, and the remaining test run can occur at any time during the month, except that there must be at least 6 days between two of the runs. All valid test runs must be used when determining the secondary TF emissions. TF Emissions determined by this requirement are combined with the TF Primary Control System emissions (rolling monthly average), and divided by the total aluminum production, to monitor compliance with potline TF emission limits (as prescribed in 40 CFR 63, Subpart LL and ARM 17.8.1213).
- I.7. CFAC shall perform at least one emission measurement test run for Polycyclic Organic Matter (POM) each month on each potline (each Method 14 manifold system). Test runs must be the same duration as a pot cycle, or 48 hours. All valid test runs must be used when determining the secondary POM emissions. POM emissions determined by this requirement are combined with measured POM emissions from the Primary Control Systems, and divided by the total aluminum production, to monitor compliance with POM emission limits (as prescribed in 40 CFR Part 63, Subpart LL and ARM 17.8.1213).

# **Record keeping**

- I.8. Method 9 tests shall be conducted in accordance to the Montana Source Test Protocol and Procedures Manual. The test reports shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106).
- I.9. CFAC shall maintain on-site records of the daily visible emissions observed from the potline roofs, any exceedances above the 10% opacity requirement of III.I.1, and any maintenance or repair initiated as a result of excessive visible emissions from the potline roof monitors (ARM 17.8.1212).
- I.10. CFAC shall maintain a record of the results from all valid TF emission measurement runs performed on the Method 14 Manifolds for all potlines. The potline secondary TF emissions will be calculated based upon the testing required in III.I.6 (ARM 17.8.1212).
- I.11. CFAC shall maintain a record of the results from all valid POM emission measurement runs performed on the Method 14 Manifolds for all potlines. The potline secondary POM emissions will be calculated based upon the testing required in III.I.7 (ARM 17.8.1212).

#### Reporting

- I.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- I.13. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- I.14. The quarterly reporting shall provide (ARM 17.8.1212):
  - a. The results of all source testing that was performed during the quarter;
  - b. The calculated secondary TF and POM emissions from the potline roofs (TF-Monthly and POM-Quarterly);
  - c. The combined TF emissions from the Primary Control System and the secondary emissions from the potline roof monitors;
  - d. The combined POM emissions from the Primary Control System and the secondary emissions from the potline roof monitors;

- e. The tons of aluminum produced (TAP) for each potline per month and quarter;
- f. The lb of TF emitted per TAP for each potline, and each emission averaging group, per month;
- g. The lb of POM emitted per TAP for each potline, and each emission averaging group, per quarter;
- h. The number of visible emission exceedances occurring during the quarter; and
- i. A summary of any corrective actions taken as a result of the daily visual surveys of visible emissions.

Requirements III.I.12(c)-(h) above are the same as those specified in III.H.13(c)-(h). When CFAC complies with the requirements of c through h above, it is also satisfying the reporting requirements of III.H.13(c)-(h).

#### J. EU039 - EU043 CASTING FURNACE EMITTING UNITS

EU039 - Casting Furnace #3 - CO01 EU040 - Casting Furnace #4 - CO02 EU041 - Casting Furnace #6 - CO03 EU042 - Casting Furnace #7 - CO04 EU043 - Casting Furnace #8 & #9 - CO05

Condition(s)	Pollutant/	Permit Limit	Compliance Demonst	ration	Reporting
	Parameter		Method	Frequency	Requirements
J.1, J.4, J.5, J.6, J.7	Opacity	40%	Natural Gas or Liquid Petroleum Gas Combustion	Ongoing	Semi-annual Certification
J.2, J.4, J.5, J.6, J.7	Particulate Matter	$E = 0.882xH^{-0.1664}$	Natural Gas or Liquid Petroleum Gas Combustion	Ongoing	Semi-annual Certification
J.3, J.4, J.5, J.6, J.7	Sulfur in Fuel	50 gr/100 cu ft	Natural Gas or Liquid Petroleum Gas Combustion	Ongoing	Semi-annual Certification

#### **Conditions**

- J.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Casting Furnace #3-CO01, Casting Furnace #4-CO02, Casing Furnace #6-CO03, Casting Furnace #7-CO04, and Casting Furnaces #8 & #9-CO05, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- J.2. CFAC shall not cause or authorize particulate matter caused by combustion, from fuel burning equipment installed before November 23, 1968, to be discharged from any outdoor stack or chimney in excess of the value calculated by  $E = 0.882 \text{xH}^{-0.1664}$ , where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lb/MMBtu (ARM 17.8.309).
- J.3. CFAC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).

## **Compliance Demonstration**

J.4. CFAC shall monitor compliance for the conditions in Section III.J.1, Section III.J.2, and Section III.J.3, pertaining to the facility's natural gas casting furnaces by burning only natural gas or liquid petroleum gas. This does not preclude the Department from initiating an enforcement action if a Reference Method test indicates one of the limits is being violated (ARM 17.8.1213).

## Record keeping

J.5. CFAC shall maintain on site a casting furnace operations log documenting any casting furnace stack specifications which deviate from normal operations as specified in Section III.J.1, III.J.2, and III.J.3. At a minimum, the furnace operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

## Reporting

- J.6. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements, and that only natural gas or liquid petroleum gases were combusted (ARM 17.8.1212).
- J.7. The semi-annual compliance certification report shall summarize any deviations from normal operations as described in III.J.5 (ARM 17.8.1212).

#### K. EU044 - EU048 CASTING PIT EMITTING UNITS

EU044 - Casting Pit #3 - CO06
EU045 - Casting Pit #4 - CO06
EU046 - Casting Pit #6 & #7 - CO06
EU046 - Casting Pit #6 & #7 - CO06

Condition(s)	Pollutant/	Permit Limit	<b>Compliance Demonstration</b>		Reporting
	Parameter		Method	Frequency	Requirements
K.1, K.3, K.5, K.7	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
K.2, K.4, K.6, K.7	Particulate Matter	$E = 4.10 \times P^{0.67}$	Normal Operations	Ongoing	Semi-annual

#### **Conditions**

- K.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Casting Pits #3, #4, #6, #7, #8, #9, (CO06), and Dross Handling-CO07, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- K.2. The particulate emissions from process weight shall not exceed the value calculated by E = 4.10 x P  $^{0.67}$ , where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

# **Compliance Demonstration**

- K.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. The Method 9 test shall be used to monitor compliance with the 40% opacity limit. Because all casting activities are conducted indoors, Method 9 testing will only focus on the visible emissions exiting from the openings of the casting buildings (ARM 17.8.1213).
- K.4. CFAC is required to maintain normal operations to monitor compliance with section III.K.2 (ARM 17.8.1213).

## Record keeping

- K.5. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- K.6. CFAC shall maintain on site a casting pit operations log documenting any casting pit vent specifications which deviate from normal operations as specified in Section III.K.1 and III.K.2. At a minimum, the casting pit operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

#### Reporting

K.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and procedures manual (ARM 17.8.106 and ARM 17.8.1212).

- K.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- K.9. The semi-annual compliance monitoring reports shall contain a summary of (ARM 17.8.1212)
  - a. Any source tests conducted during the period; and
  - b. Any deviations from normal operations as described in III.K.6.

# L. EU049 - EU050 ALUMINUM SAW EMITTING UNITS

EU049 – Sheet Ingot Saw - CO08

EU050 - T- Ingot Saw - CO09

Condition(s)	Pollutant/Parameter	Permit Limit	Compli	Compliance Demonstration	
			Method	Frequency	Requirements
L.1, L.3, L.5, L.6, L.7, L.8	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
L.2, L.4, L.5, L.6, L.7, L.8	Particulate Matter	$E = 4.10 * P^{0.67}$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

#### **Conditions**

- L.1. CFAC shall not cause or authorize emissions from the Sheet Ingot Saw-CO08 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)). As a result of venting indoors, EU050 (the T-Ingot Saw) is not currently subject to this requirement.
- L.2. The particulate emissions from process weight shall not exceed the value calculated by E = 4.10 x  $P^{0.67}$ , where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

## **Compliance Demonstration**

- L.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).
- L.4. As required by the Department and Section III.A.1, CFAC shall test the above sources for particulate matter in accordance with Reference Method 5 to monitor compliance with the limitation contained in Section III.L.2. The source test must be performed as specified in the Montana Source Testing Protocol and Procedures Manual (ARM 17.8.106).

# **Record keeping**

L.5. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

#### Reporting

- L.6. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- L.7. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

L.8. The semi-annual reporting shall provide a summary of any source testing conducted during the period (ARM 17.8.1212).

## M. EU051 - SANDBLASTING ACTIVITIES - CR01

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance I	Demonstration	Reporting
			Method	Frequency	Requirements
M.1, M.4, M.7, M.9, M.10, M.11	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
M.2, M.5, M.7, M.9, M.10, M.11	Opacity	Reasonable Precautions	Visual Surveys	Weekly	Semi-annual
M.3, M.6, M.7, M.8, M.9, M.10, M.11	Particulate Matter	$E = 4.10 * P^{0.67}$	Normal Operations	Ongoing	Semi-annual

#### **Conditions**

- M.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from Sandblasting Activities-CR01 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- M.2. CFAC shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emission of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.308(1)).
- M.3. CFAC shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the atmosphere in excess of the value calculated by  $E = 4.10x P^{0.67}$ , where E is the emission rate in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

## **Compliance Demonstration**

- M.4. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).
- M.5. Once per calendar week during daylight hours, CFAC shall visually survey the Sandblasting units for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, CFAC shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then CFAC shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve CFAC of a liability for a violation determined using Method 9 (ARM 17.8.1213).
- M.6. CFAC is required to maintain normal operations to monitor compliance with section III.M.3 (ARM 17.8.1212)

# Record keeping

- M.7. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- M.8. The log of weekly visual survey results shall be maintained on site and submitted to the Department upon request. The log shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- M.9. CFAC shall maintain on site a sandblasting operations log documenting any sandblasting emissions which deviate from normal operations as specified in Sections III.M.1, III.M.2, and III.M.3. At a minimum, the sandblasting operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

## Reporting

- M.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- M.11. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- M.12. The semi-annual reporting shall provide a summary of (ARM 17.8.1212):
  - a. Any Method 9 tests that were performed;
  - b. All visual surveys that were conducted; and
  - Any instances of excessive emissions and any corrective actions taken as a result of excessive emissions.

#### N. EU052 – LECTROMELT FURNACE EMITTING UNIT - CR03

Condition(s)	Pollutant/	Permit Limit	Complian	ce Demonstration	Reporting
	Parameter		Method	Frequency	Requirements
N.1, N.3, N.4, N.6, N.7, N.8, N.9, N.10	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Baghouse I & M (Appendix I)	Ongoing	Semi-annual
N.2, N.4, N.5, N.7, N.8, N.9, N.10	Particulate Matter	$E = 4.10 * P^{0.67}$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

#### **Conditions**

- N.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Lectromelt Furnace-CR03 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- N.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10*P^{0.67}$ , where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

# **Compliance Demonstration**

- N.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. The Method 9 test shall be used to determine compliance with the 20% opacity limit (ARM 17.8.1213).
- N.4. CFAC shall operate and maintain the baghouse in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (ARM 17.8.1213).
- N.5. As required by the Department and Section III.A.1, CFAC shall perform a Method 5 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

## Record keeping

- N.6. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection and Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).
- N.7. Method 5 and Method 9 test reports shall be maintained on site and shall be submitted to the Department, upon request, in accordance with the Montana Source Protocol and Procedures Manual (ARM 17.8.106).

#### Reporting

- N.8. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- N.9. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- N.10. The semi-annual compliance monitoring reports shall include a summary of (ARM 17.8.1212):
  - a. The results of any test conducted during the reporting period; and
  - b. Any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

#### O. EU053-ROD MILL/MATERIAL STORAGE/BATH CRUSHING EMITTING UNIT-CR04

Condition(s)	Pollutant /	Permit Limit	Compliance I	Demonstration	Reporting
	Parameter		Method	Frequency	Requirements
O.1, O.3, O.4, O.5, O.6, O.7, O.8, O.9	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Operations & Maintenance Baghouse I & M (Appendix I)	Ongoing	Semi-annual
O.2, O.3, O.4, O.5, O.6,O.7, O.8, O.9	Particulate Matter	$E = 55*P^{0.11}-40$	Method 5	As Required by the Department and Section III.A.1	Semi-annual

## **Conditions**

O.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Rod Mill/Material Storage/Bath Crushing Unit-CR04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

O.2. The particulate emissions from process weight shall not exceed the value calculated by E = 55.0 x  $P^{0.11}$ - 40, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

## **Compliance Demonstration**

- O.3. CFAC shall operate and maintain the rod mill baghouse in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) (Arm 17.8.1213).
- O.4. As required by the Department and Section III.A.1, CFAC shall perform Method 5 and Method 9 tests in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1213).

## **Record keeping**

- O.5. CFAC shall maintain on-site records of all inspection and maintenance activities performed on the baghouses in accordance with the Pollution Control Device Inspection & Maintenance Plan (Appendix I) and submit such records to the Department upon request (ARM 17.8.1212).
- O.6. Method 5 and Method 9 test reports must be maintained on site and must be submitted to the Department in accordance with the Montana Source Testing Protocol and Procedures Manual (ARM 17.8.106).

# Reporting

- O.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- O.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- O.9. The semi-annual compliance monitoring reports shall include (ARM 17.8.1212):
  - a. The results of any Method 5 or Method 9 tests conducted during the last reporting period; and
  - b. A summary of any corrective actions taken as a result of the inspections and maintenance as required by the Pollution Control Device Inspection & Maintenance Plan (Appendix I).

#### P. EU054 – EU062 NATURAL GAS BOILER EMITTING UNITS

EU054 - Change House Boiler #1 - MP01	EU059 - Paste Plant Boiler #1 - MP11
EU055 - Change House Boiler #2 - MP02	EU060 - Paste Plant Boiler #2 - MP12
EU056 - Lab Boiler #1 - MP07	EU061 - Warehouse Boiler #1 - MP16
EU057 - Machine Shop Boiler #1 - MP08	EU062 - Warehouse Boiler #2 - MP17
EU058 - Machine Shop Boiler #2 - MP09	

Condition(s)	Pollutant/	Permit Limit	Compliance Demonstration		Reporting
	Parameter		Method	Frequency	Requirements
P.1, P.4, P.5, P.6, P.7	Opacity	20%	Natural Gas Combustion	Ongoing	Semi-annual
P.2, P.4, P.5, P.6, P.7	Particulate Matter	$E = 1.026*H^{-0.233}$	Natural Gas Combustion	Ongoing	Semi-annual
P.3, P.4, P.5, P.6, P.7	Sulfur in Fuel	50 gr/100 cu ft	Natural Gas Combustion	Ongoing	Semi-annual

## **Conditions**

P.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Change House Boilers #1-MP01, Change House Boiler #2-MP02, the Lab Boiler #1-MP07, Machine Shop Boiler #1-MP08, Machine Shop Boiler #2-MP09, Paste Plant Boiler #1-MP11, Paste Plant Boiler #2-

- MP12, Warehouse Boiler #1-MP16, and Warehouse Boiler #2-MP17, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- P.2. CFAC shall not cause or authorize particulate matter caused by combustion, from fuel burning equipment installed after November 23, 1968, to be discharged from any outdoor stack or chimney in excess of the value calculated by  $E = 1.026 \text{ x H}^{-0.233}$ , where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lb/MMBtu (ARM 17.8.309).
- P.3. CFAC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).

#### **Compliance Demonstration**

P.4. Monitoring compliance for Section III.P.1, III.P.2, and III.P.3 may be satisfied for their natural gas boilers by burning only natural gas. This does not preclude the Department from initiating an enforcement action if a Reference Method test indicates one of the limits is being violated (ARM 17.8.1213).

# **Record keeping**

P.5. CFAC shall maintain on site a boiler operations log documenting any boiler stack specifications which deviate from normal operations as specified in Sections III.P.1, III.P.2, and III.P.3. At a minimum, the boiler operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

#### Reporting

- P.6. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements, and that only natural gas was combusted (ARM 17.8.1212).
- P.7. The semi-annual compliance certification report shall summarize any deviations from normal operations as indicated in P.5 (ARM 17.8.1212).

#### Q. EU063 – TRUCK, EQUIPMENT, AND HAUL ROAD EMISSIONS – MP05

Condition(s)	Pollutant/ Permit Limit		Compliance Demonstration		Reporting
	Parameter		Method	Frequency	Requirements
Q.1, Q.3, Q.4, Q.5, Q.6, Q.7	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
Q.2, Q.3, Q.4, Q.5, Q.6, Q.7	Opacity	Reasonable Precautions	Method 9	As Required by the Department and Section III.A.1	Semi-annual
			Maintenance, Treatment, and Speed	As Needed	Semi-annual

## **Conditions**

- Q.1. CFAC shall not cause or authorize the production, handling, transportation, or storage of any material, unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.308(1)).
- Q.2. CFAC shall maintain all portions of the haul roads, access roads, parking lots, and general plant area as necessary to maintain compliance with the reasonable precautions limit in Section III.Q.1. CFAC shall treat all unpayed portions of the haul roads, access roads, parking lots, or the general plant

area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section III.Q.1 (ARM 17.8.749).

## **Compliance Demonstration**

Q.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).

#### Record keeping

Q.4. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

## Reporting

- Q.5. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- Q.6. The annual compliance certification report required by Section V.B must contain a certification stating whether CFAC is in compliance with the above applicable requirements (ARM 17.8.1212).
- Q.7. The semi-annual compliance reporting shall include the results of any Method 9 testing conducted during the period (ARM 17.8.1212).

# R. EU064 – GASOLINE STORAGE (TANK) EMITTING UNIT – MP04

Condition(s)	Pollutant/Parameter	Permit Limit	<b>Compliance Demonstration</b>		Reporting
			Method	Frequency	Requirements
R.1, R.3, R.5, R.6, R.7, R.8	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
R.2, R.4, R.6, R.7, R.8	Tanks	Submerged Fill	Log	Ongoing	Semi-annual

#### **Conditions**

- R.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from any Gasoline Storage-MP04 that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- R.2. CFAC shall load (fill) the gasoline storage tank only through a permanent submerged fill pipe, or shall equip the tank with a vapor loss control device (ARM 17.8.324(3)).

# **Compliance Demonstration**

- R.3. As required by the Department and Section III. A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. Each observation period shall be a minimum of 6 minutes, unless any one reading is 20% or greater, at which point the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is the shorter period of time (ARM 17.8.1213).
- R.4. CFAC shall maintain of log of any instances in which the submerged fill pipe was not used (ARM 17.8.1213).

# Record keeping

- R.5. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- R.6. CFAC shall maintain of log as required in Section III.R.4. The log shall include the circumstance, date, and initials of documenting personnel (ARM 17.8.1213).

## Reporting

- R.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- R.8. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- R.9. The semi-annual reporting shall provide (ARM 17.8.1212):
  - a. A summary of the results from any source testing that was performed; and
  - b. A summary of any instances when the submerged pipe was not used during loading operations.

#### S. EU065 – SOW CASTING LINE

**EU065 – Sow Casting Line** 

Condition(s)	Pollutant/	Permit Limit	Compliance I	Demonstration	Reporting
	Parameter		Method	Frequency	Requirements
S.1, S.3, S.5, S.7, S.8, S.9	Opacity	40%	Method 9	As Required by the Department and Section III.A.1	Semi-annual
S.2, S.4, S.6, S.7, S.8, S.9	Particulate Matter	$E = 4.10 \text{ x P}^{0.67}$	Normal Operations	Ongoing	Semi-annual

#### **Conditions**

- S.1. CFAC shall not cause or authorize emissions to be discharged to the atmosphere from the Sow Casting Line that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- S.2. The particulate emissions from process weight shall not exceed the value calculated by E = 4.10 x P  $^{0.67}$ , where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).

#### **Compliance Demonstration**

- S.3. As required by the Department and Section III.A.1, CFAC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual. The Method 9 test shall be used to monitor compliance with the 40% opacity limit. Because all casting activities are conducted indoors, Method 9 testing will only focus on the visible emissions exiting from the openings of the casting buildings (ARM 17.8.1213).
- S.4. CFAC is required to maintain normal operations to monitor compliance with section III.S.2 (ARM 17.8.1213).

# **Record keeping**

- S.5. All test reports shall be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- S.6. CFAC shall maintain on site a sow casting operations log documenting any casting pit vent specifications which deviate from normal operations as specified in Section III.S.1 and III.S.2. At a minimum, the sow casting operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- S.7. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and procedures manual (ARM 17.8.106 and ARM 17.8.1212).
- S.8. The annual compliance certification report required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- S.9. The semi-annual compliance monitoring reports shall contain (ARM 17.8.1212):
  - a. A summary of the results of any source tests that were performed; and
  - b. Any deviations from normal operations as described in Section III.S.6.

# SECTION IV NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emission unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

#### A. FACILITY-WIDE

The following table contains non-applicable requirements that are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation		Reason
State	Federal	
ARM 17.8.321, ARM 17.8.323, and ARM 17.8.610		These rules are not applicable because the facility is not listed in the source category cited in the rules.
ARM 17.8 316 ARM 17.8.320, ARM 17.8.324(4)-(6)		These rules are not applicable because the facility does not have the specific emission unit cited in the rules.
	40 CFR 60, Subparts C, Ca, Cb 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E-J 40 CFR 60, Subparts K, Ka, Kb 40 CFR 60, Subparts L-Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-XX 40 CFR 60, Subparts AAA-BBB 40 CFR 60, Subparts DDD 40 CFR 60, Subparts PFF-LLL 40 CFR 60, Subparts NNN-VVV 40 CFR 61, Subparts B-F 40 CFR 61, Subparts H-L 40 CFR 61, Subparts N-R 40 CFR 61, Subparts V-W 40 CFR 61, Subpart Y 40 CFR 61, Subpart BB 40 CFR 61, Subpart BB	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
	40 CFR 63, Subpart B 40 CFR 63, Subparts F-I 40 CFR 63, Subparts L-M 40 CFR 63, Subpart Q 40 CFR 82, Subparts A-E 40 CFR 82, Subparts G-H	These requirements are not applicable because the facility is not an affected source as defined in these regulations.
	40 CFR 72 through 40 CFR 78.	These requirements are not applicable because the facility is not an affected source as defined by the acid rain regulations.
	40 CFR 68	This rule is not applicable because the facility does not meet the threshold quantity for any regulated substance.

## **B.** EMISSION UNITS

The permit application identified applicable requirements: non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A; these requirements relate to each specific unit as well as facility wide.

#### SECTION V – GENERAL PERMIT CONDITIONS

# A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

- 1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
- 2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety, or environmental impacts were unforeseeable and could not have otherwise been avoided.
- 4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
- 5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
- 6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

# B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

- 1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 December 31).

- 3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification:
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term or condition during the certification period, consistent with ARM 17.8.1212;
  - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
  - d. Such other facts as the Department may require to determine the compliance status of the source.
- 4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

#### C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

- 1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
- 2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
- 3. Nothing in this permit alters or affects the following:
  - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section.
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
  - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA.
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA.
  - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA.
  - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA.

- g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

### D. Monitoring, Record keeping, and Reporting Requirements

ARM 17.8, Subchapter 12, operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information.
  - a. The date, place as defined in the permit, and time of sampling or measurement;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.
- 3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement

or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

# E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

# F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

- 1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit.
  - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 3. These emergency provisions are in addition to any emergency, malfunction, or upset provision contained in any applicable requirement.

## **G.** Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

- 1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - a. Enter the premises where a source required to obtain a permit is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of the permit.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
  - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
  - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
- 2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

#### H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

- 1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
- 2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
- 3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

#### I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.

2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

# J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

- 1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met.
  - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7.
  - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10.
  - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions.
  - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit.
  - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.
- 2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
- 3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met.
  - a. Each proposed change does not weaken the enforceability of any existing permit conditions.
  - b. The Department has not objected to such change.
  - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition.
  - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- 5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

#### **K.** Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

- 1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
  - b. Every significant change in existing permit monitoring terms or conditions;
  - c. Every relaxation of permit reporting or record keeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
  - d. Any other change determined by the Department to be significant.
- 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
- 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

### L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances.

- 1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2).
- 2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit.
- 3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
- 4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

## M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.

- 2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
- 3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
- 4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

#### N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

- 1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
- 2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

# O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

- 1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
- 2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

## P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

# Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### **R.** Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

# S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

#### T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

#### U. Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

#### V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

### W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

# X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

#### Y. Preconstruction Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §743, 744, 745 and 764 (ARM 17.8.745(1), and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

- 1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.745(1).
- 2. The permittee shall comply with ARM 17.8.743, 744, 745, 748 and 764.
- 3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):

- a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2).
- b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8.
- c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804.
- d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting.
- e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
- 4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1). (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

#### Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

#### AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, et seq., and ARM 17.74.401, et seq. (State only)

# **BB.** Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners 40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

# CC. Stratospheric Ozone Protection – Recycling and Emission Reductions 40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

- 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
- 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
- 3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161.
- 4. Persons disposing of small appliances, MVACs, and MVAC-like (as defined at §82.152) appliances must comply with record keeping requirements pursuant to §82.166.
- 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

# DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification

#### **EE.** Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

# **APPENDICES**

#### Appendix A - INSIGNIFICANT EMISSION UNITS

**Disclaimer:** The information in this Appendix Hs not State or Federally enforceable, but is presented to assist CFAC, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emission unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to section 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

#### **List of Insignificant Activities:**

The following table of insignificant sources and/or activities was provided by CFAC. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

<b>Emission Unit ID</b>	Description
IEU03	Collector Bar Shotblasting - CR02
IEU04	Anode Debris Storage - CR05
IEU05	Anode Abrader - CR06
IEU06	Shed 11 Pot Rebuild / Masonry Mixer - CR08
IEU07	Diesel Storage Tanks - MP03
IEU08	Natural Gas Space Heaters - MP06
IEU09	Open Burning - MP10
IEU10	Plant Site Sanitary Landfill - MP13
IEU11	Propane Storage - MP14
IEU12	Waste Oil Heat Recovery - MP18
IEU13	MSDS Chemicals / Plant-wide Usage - MP19
IEU14	Carpenter Shop Cyclone

#### **Appendix B - DEFINITIONS and ABBREVIATIONS**

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, et seq.

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors;
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) Requires more frequent monitoring or reporting by CFAC;
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or
- (f) Incorporates any other type of change that the Department has determined to be similar to those revisions set forth in (a)-(e), above.
- "Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit).
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
  - (b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
  - (c) Any standard or other requirement under sec. 7411 of the FCAA, including sec. 7411(d);
  - (d) Any standard or other requirement under sec. 7412 of the FCAA, including any requirement concerning accident prevention under sec. 7412(r)(7), but excluding the contents of any risk management plan required under sec. 7412(r);
  - (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
  - (f) Any requirements established pursuant to sec. 7661c(b) or sec. 7414(a)(3) of the FCAA;
  - (g) Any standard or other requirement governing solid waste incineration, under sec. 7429 of the FCAA;
  - (h) Any standard or other requirement for consumer and commercial products, under sec. 7511b(e) of the FCAA;

- (i) Any standard or other requirement for tank vessels, under sec. 7511b(f) of the FCAA;
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to sec. 7661c(e) of the FCAA; or
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under subchapter 6.
- "Department" means the Montana Department of Environmental Quality.
- "Emission unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- **"Excess emissions"** means any visible emissions from a stack or source, viewed during the visual surveys, believed to exceed the visible emissions during normal operating conditions.
- "Excess fugitive emissions" means any visible emissions that leave the plant site boundaries.
- "FCAA" means the Federal Clean Air Act, as amended.
- "Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana State Implementation Plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana State Implementation Plan and expressly requires adherence to any permit issued under such program.
- "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- "General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.
- **"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to section 112(b) of the FCAA.
- "Non-federally enforceable requirement" means the following as they apply to emission units in a source requiring an air quality operating permit.
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana State Implementation Plan, approved or promulgated by the administrator through rule making under Title I of the FCAA;
  - (b) Any term, condition, or other requirement contained in any air quality preconstruction permit issued by the Department under subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;
  - (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

# "Regulated air pollutant" means the following:

- (a) Nitrogen oxides or any volatile organic compounds.
- (b) Any pollutant for which a national ambient air quality standard has been promulgated.
- (c) Any pollutant that is subject to any standard promulgated under sec. 7411 of the FCAA.
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA.
- (e) Any pollutant subject to a standard or other requirement established or promulgated under sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in section 7412(e) of the FCAA.
  - (ii) Any pollutant for which the requirements of section 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to sec. 7412(g)(2) requirement.

#### "Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor; respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

#### **Abbreviations:**

ARM Administrative Rules of Montana
ASTM American Society of Testing Materials
BACT Best Available Control Technology

BDT bone dry tons

BTU British Thermal Unit

CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dscf dry standard cubic foot

dscfm dry standard cubic foot per minute
EEAP Emergency Episode Action Plan
EPA U.S. Environmental Protection Agency

EPA Method Test methods contained in 40 CFR 60, Appendix A

EU emission unit

FCAA Federal Clean Air Act

gr grains

HAP hazardous air pollutant IEU insignificant emission unit

Mbdft thousand board feet

Method 5 40 CFR 60, Appendix A, Method 5 Method 9 40 CFR 60, Appendix A, Method 9

MMbdft million board feet

MMBTU million British Thermal Units

NO<sub>x</sub> oxides of nitrogen NO<sub>2</sub> nitrogen dioxide

 $O_2$  oxygen Pb lead

PM particulate matter

PM10 particulate matter less than 10 microns in size

psi pounds per square inch scf standard cubic feet

SIC Source Industrial Classification

SO<sub>2</sub> sulfur dioxide SO<sub>x</sub> oxides of sulfur tpy tons per year U.S.C. United States Code VE visible emissions

VOC volatile organic compound

# **Appendix C - NOTIFICATION ADDRESSES**

# Compliance Notifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

United States EPA Air Program Coordinator Region VIII, Montana Office 10 W. 15<sup>th</sup> Suite 3200 Helena, MT 59626

#### Permit Modifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance Air and Radiation Program US EPA Region VIII 8P-AR 1595 Wynkoop Street Denver, CO 80202-1129

# Appendix D - AIR QUALITY INSPECTOR INFORMATION

**Disclaimer:** The information in this Appendix Hs not State or Federally enforceable but is presented to

assist CFAC, permitting authority, inspectors, and the public.

# 1. **Direction to Plant:**

CFAC is adjacent to the community of Columbia Falls, Montana, with a physical address of 2000 Aluminum Drive.

# 2. Safety Equipment Required:

Safety Equipment required to enter the facility are: hard hat, protective eyewear, and safety shoes or boots. Additional personal protective equipment may be necessary in certain areas, such as respiratory protection.

# 3. Facility Plot Plan:

A copy of the facility plot plan was submitted with the operating permit application on June 12, 1996.

# Appendix E - CFAC MACT IMPLEMENTATION PLAN

Although the hard copy of Appendix E has been removed from the permit, the contents of Appendix E, CFAC MACT Implementation Plan remain as applicable requirements as stated in the Title V Operating Permit #OP2655-02. To receive a hard copy of this appendix, please contact one of the following:

The Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

Columbia Falls Aluminum Company, LLC 2000 Aluminum Drive Columbia Falls, Montana 59912 Phone #: (406) 892-8211

# Appendix F - CFAC MACT QUICK REFERENCE GUIDE

Although the hard copy of Appendix F has been removed from the permit, the contents of Appendix F, CFAC MACT Quick Reference Guide remain as applicable requirements as stated in the Title V Operating Permit #OP2655-02. To receive a hard copy of this appendix, please contact one of the following:

The Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

Columbia Falls Aluminum Company, LLC 2000 Aluminum Drive Columbia Falls, Montana 59912 Phone #: (406) 892-8211

# Appendix G - STARTUP, SHUTDOWN AND MALFUNCTION PLAN (SSM)

Although the hard copy of Appendix G has been removed from the permit, the contents of Appendix G, Startup, Shutdown and Malfunction Plan (SSM) remain as applicable requirements as stated in the Title V Operating Permit #OP2655-02. To receive a hard copy of this appendix, please contact one of the following:

The Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

Columbia Falls Aluminum Company, LLC 2000 Aluminum Drive Columbia Falls, Montana 59912 Phone #: (406) 892-8211

#### Appendix H - POTLINE ROOF VENT OPACITY COMPLIANCE DEMONSTRATION

#### Proposal to Perform Method 9 Visual Observations on Potroom Roofs

CFAC proposes to perform Method 9 visual observations on portions of each potline's roof in order to demonstrate compliance with ARM 17.8.332. This is similar in concept to EPA Method 14 where a manifold extracts emissions from either a 35-meter (115 feet) length of a roofline, or from 8% length of the roofline to determine compliance with emission standards for the entire potline. CFAC proposes to perform Method 9 observations on the following roofs:

```
Approximately 50% of Room 1 length (457 ft, representing potline 1) Approximately 35% of Room 3 length (321 ft, representing potline 2) Approximately 35% of Room 6 length (321 ft, representing potline 3) Approximately 35% of Room 7 length (321 ft, representing potline 4) Approximately 35% of Room 10 length (321 ft, representing potline 5)
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Specifically, CFAC proposes to demonstrate compliance with ARM 17.8.332 by performing quarterly Method 9 visual observations as described below. Each Method 9 observation period will be a minimum of 6 minutes unless any one reading is greater than 10%; then the observation period will be a minimum of 20 minutes.

**Room 1 (potline 1):** Method 9 observations will be taken by an observer located on the Room 2 roof, looking westward. Method 9 observations will be taken at more than one location along the north 50% of Room 1. The Method 9 observation results will be averaged to produce a final result.

**Room 3 (potline 2):** Method 9 observations will be taken by an observer located on the staircase to the Room 4 roof. The west plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 3 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 3. The Method 9 observation results will be averaged to produce a final result.

**Room 6 (potline 3):** Method 9 observations will be taken by an observer located on the staircase to the Room 5 roof. The east plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 6 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 3. The Method 9 observation results will be averaged to produce a final result.

**Room 7 (potline 4):** Method 9 observations will be taken by an observer located on the staircase to the Room 8 roof. The east plant ore silos will serve as a backdrop for the Method 9 observations. The ore silos provide a backdrop, which is approximately 321 feet, or approximately 35% of the total length of the Room 7 roof. Method 9 observations will be taken at more than one location along the north 35% of Room 7. The Method 9 observation results will be averaged to produce a final result.

**Room 10 (potline 5):** Method 9 observations will be taken by an observer located on the staircase to the Room 9 roof, looking eastward. Method 9 observations will be taken at more than one location along the north 35% of Room 10. The Method 9 observation results will be averaged to produce a final result.

CFAC shall perform daily visual surveys in a manner similar to the Method 9 procedures outlined above and it is understood by all parties that these daily visual observations are not Method 9 observations.

Permit Number: OP2655-02 H-1 Proposed: 03/10/08

#### Appendix I - Pollution Control Device Inspection and Maintenance Plan

Although the hard copy of Appendix I has been removed from the permit, the contents of Appendix I Pollution Control Device Inspection and Maintenance Plan remain as applicable requirements as stated in the Title V Operating Permit #OP2655-02. To receive a hard copy of this appendix, please contact one of the following:

The Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

Columbia Falls Aluminum Company, LLC 2000 Aluminum Drive Columbia Falls, Montana 59912 Phone #: (406) 892-8211

# Appendix J - 62 FR 52383

 $\underline{http://www.epa.gov/EPA-AIR/1997/October/Day-07/a25882.htm}$ 

#### Appendix K – Ambient Monitoring Plan

# AMBIENT AIR MONITORING PLAN COLUMBIA FALLS ALUMINUM COMPANY LLC

- 1. This ambient air monitoring plan is required by Montana Air Quality Permit (MAQP) #2655 and Title V Operating Permit #OP2655 which applies to the Columbia Falls Aluminum Company (CFAC) primary aluminum reduction plant near Columbia Falls. This monitoring plan may be modified by the Department. All requirements of this plan are considered conditions of the permit.
- 2. CFAC shall collect vegetation samples for fluoride-in-forage analysis at three air monitoring sites in the vicinity of their plant and facilities. The exact locations of the monitoring sites must be approved by the Department and meet all the siting requirements contained in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; Parts 53 and 58 of the Code of Federal Regulations; and ARM 17.8.230, or any other requirements specified by the Department.
- 3. CFAC shall continue vegetation sampling for at least one year following issuance of this permit or as determined by the Department. The air monitoring data will be reviewed by the Department and the Department will determine if continued monitoring or additional monitoring is warranted. The Department may require continued vegetation sampling to track long-term impacts of emissions from the facility or require additional vegetation sampling, ambient air monitoring or analyses if any changes take place in regard to quality and/or quantity of emissions or the area of impact from the emissions.
- 4. CFAC shall monitor the following parameters at the sites and frequencies described below:

AIRS # and Site Name	UTM <sup>1</sup> Coordinates	Parameter	Frequency	
30-029-0707 Doane	Zone 12 N 5365419 E 710886	Fluoride in Vegetation	As required by ARM 17.8.230	
30-029-0708 Hoffman	Zone 12 N 5362152 E 713305	Fluoride in Vegetation	As required by ARM 17.8.230	
30-029-0710 New Liddle	Zone 12 N 5360573 E 711411	Fluoride in Vegetation	As required by ARM 17.8.230	
<sup>1</sup> UTM = Universal Transverse Mercator				

- 5. Data recovery for all parameters shall be at least 80 percent computed on a quarterly and annual basis. The Department may require continued monitoring if this condition is not met.
- 6. Any vegetation sampling or ambient air monitoring changes proposed by CFAC must be approved in writing by the Department.
- 7. CFAC shall utilize air monitoring and quality assurance procedures which are equal to or exceed the requirements described in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; 40 CFR Parts 53 and 58 of the Code of Federal Regulations; and ARM 17.8.230, or any other requirements specified by the Department.

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- 8. CFAC shall submit an annual data report by March 15 of each year. The annual report shall consist of a narrative data summary and a data submittal of all data points on AIRS formatted paper input forms, disks or magnetic tapes which are compatible with the Department's computer system. The narrative data summary shall include:
  - a. A topographic map of appropriate scale with UTM coordinates and a true north arrow showing the vegetation sampling and air monitoring site locations in relation to the plant and the general area;
  - b. A hard copy of the individual data points;
  - c. A summary of the data collection efficiency;
  - d. A summary of the reasons for missing data; and
  - e. A summary of any fluoride-in-forage standard exceedances.
- 9. The Department may audit, or may require CFAC to contract with an independent firm to audit, the vegetation sampling network, the laboratory performing associated analyses, and any data handling procedures at unspecified times. On the basis of the audits and subsequent reports, the Department may recommend or require changes in the vegetation sampling network and associated activities in order to improve precision, accuracy and data completeness.